

Drawings

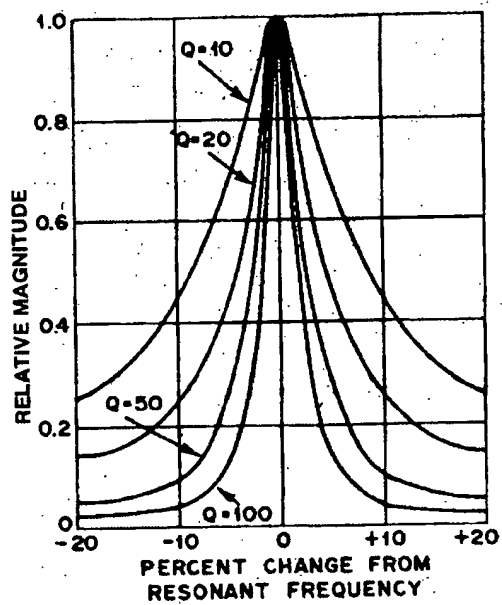


Figure 1. Response of an LC tank resonator circuit.

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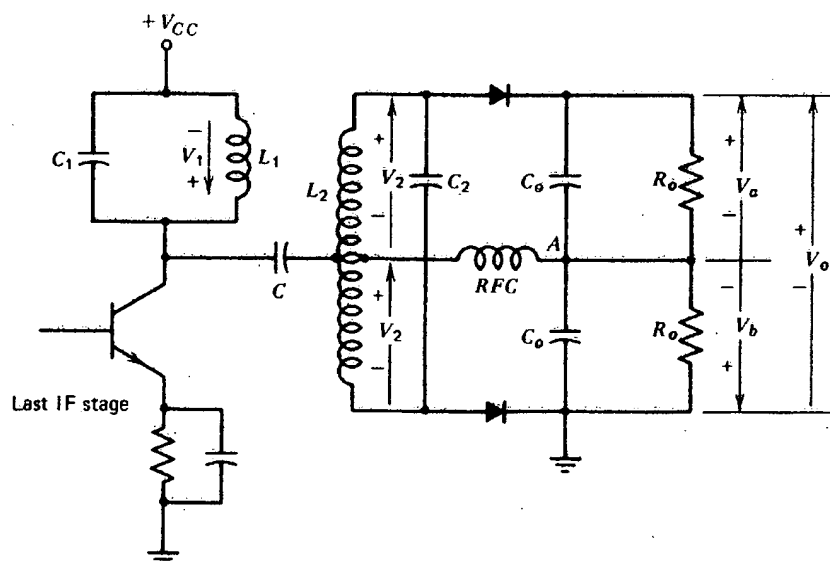


Figure 2. FM discriminator.

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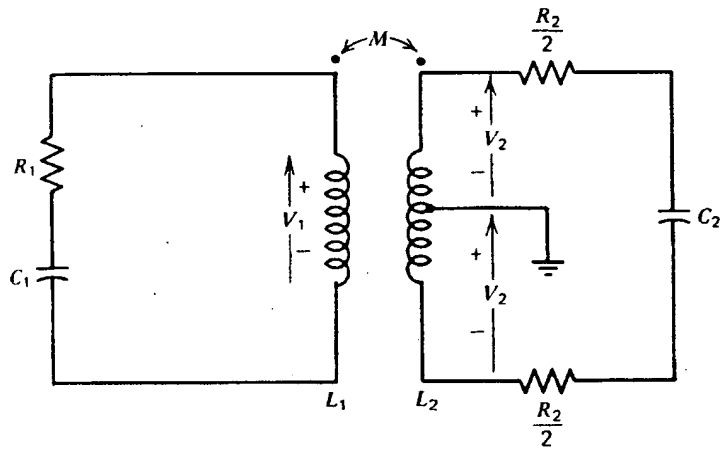


Figure 3. Circuit to illustrate the phase relationship in the discriminator. The resistors represent the internal resistance of the inductors.

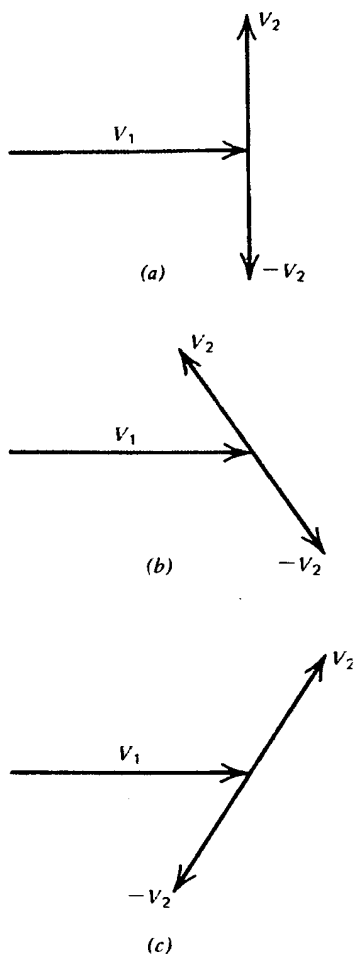


Figure 4. Phase relationship in the discriminator. (a) at resonance, (b) below resonance, (c) above resonance.

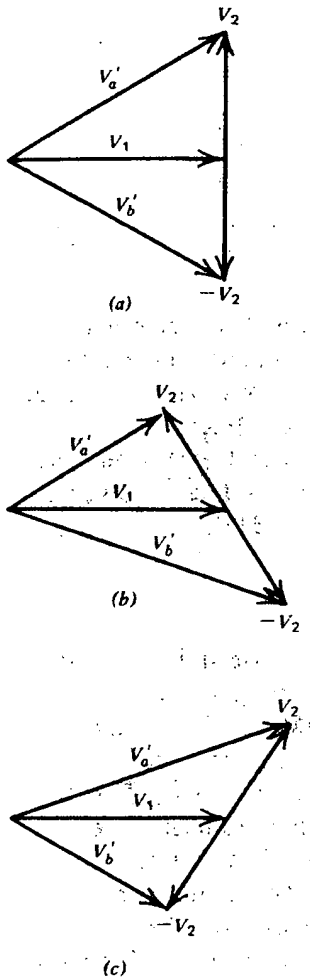


Figure 5. Phase relationship in the discriminator, showing the voltages on the diodes. (a) at resonance, (b) below resonance, (c) above resonance.

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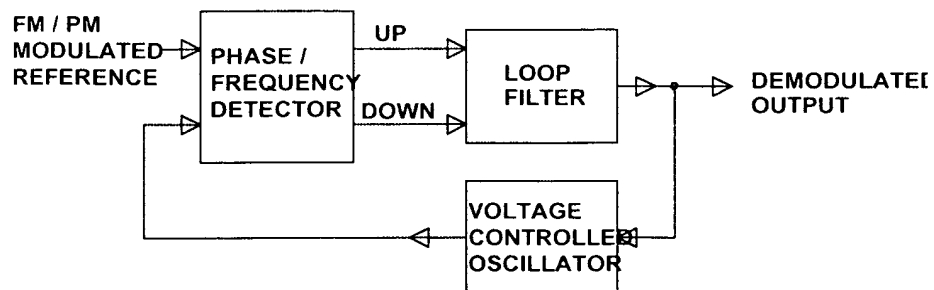


Figure 6. Phase Locked Loop FM / PM discriminator.

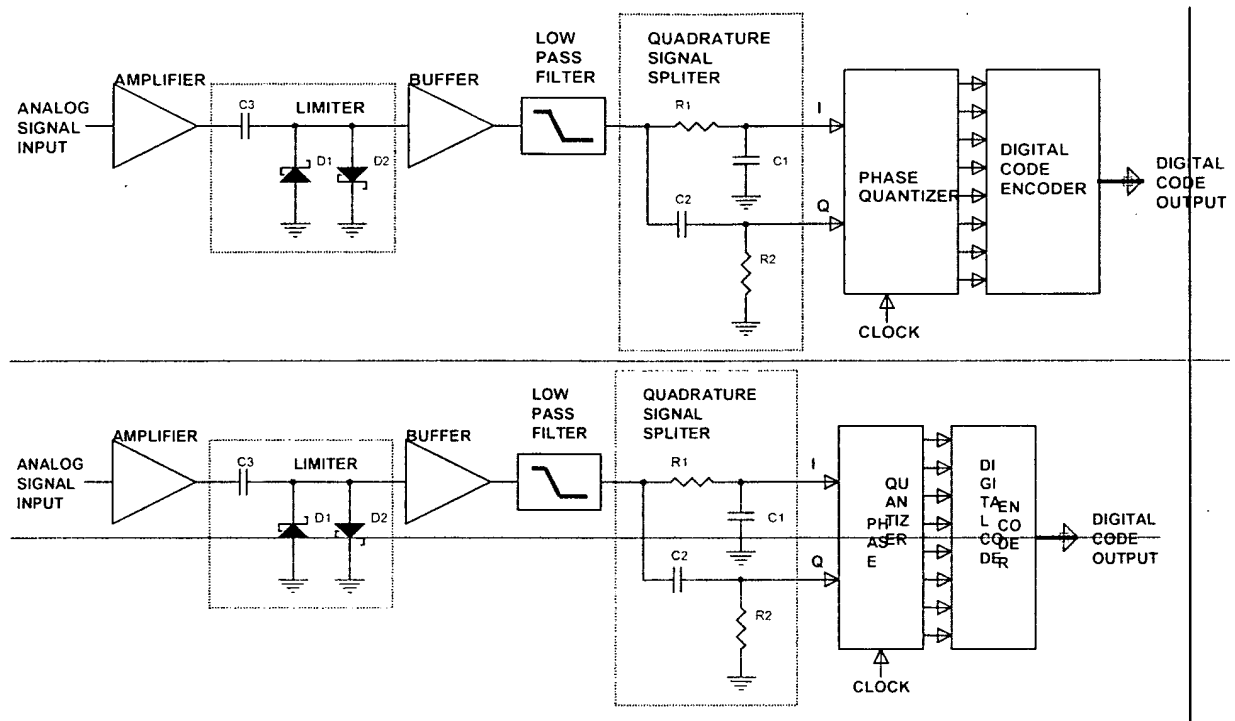


Figure 7. A direct Phase Sampler.

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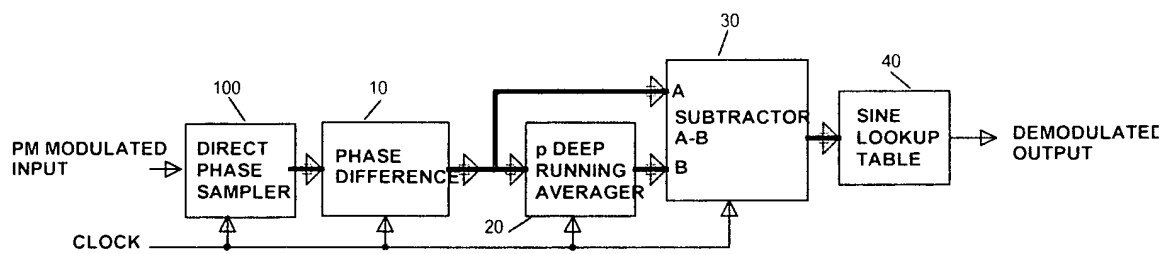


Figure 8. Direct digital PM demodulator.

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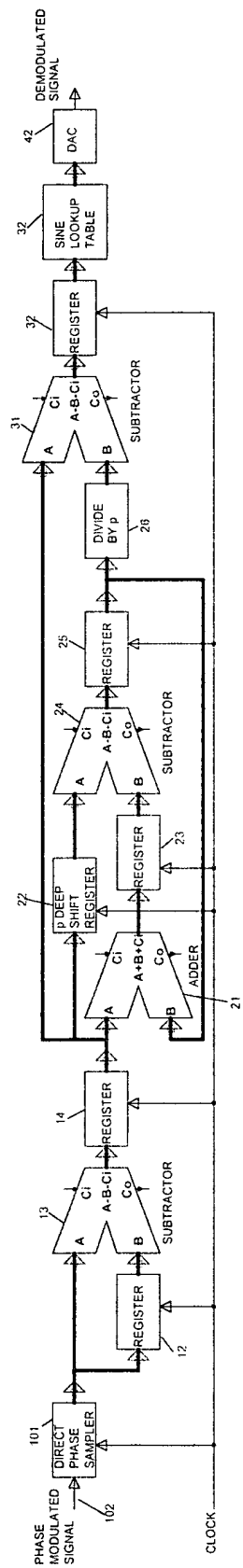
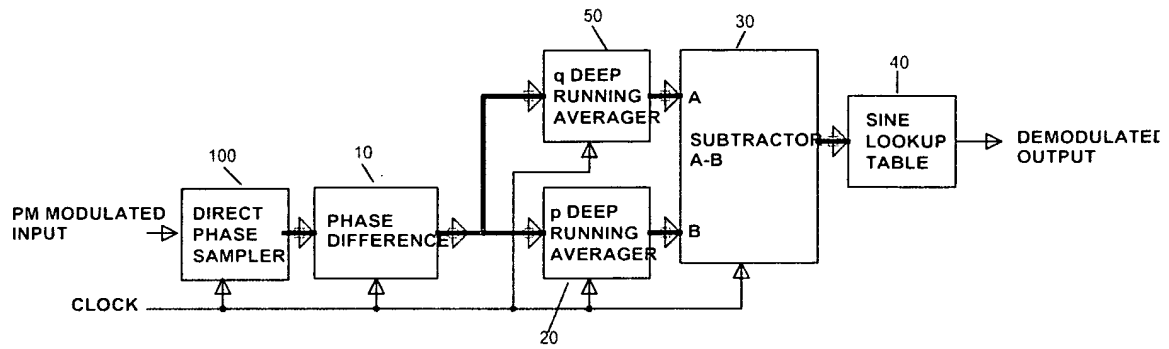


Figure 9. Direct digital PM demodulator implementation.



5 Figure 10. Direct digital FM demodulator.

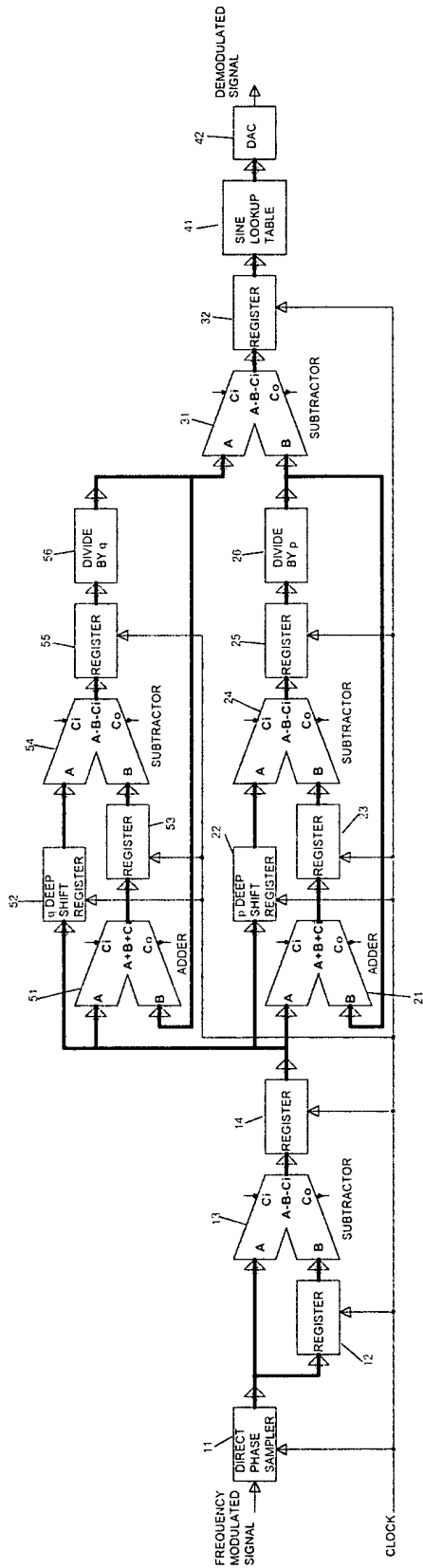


Figure 11. Direct digital FM demodulator implementation.

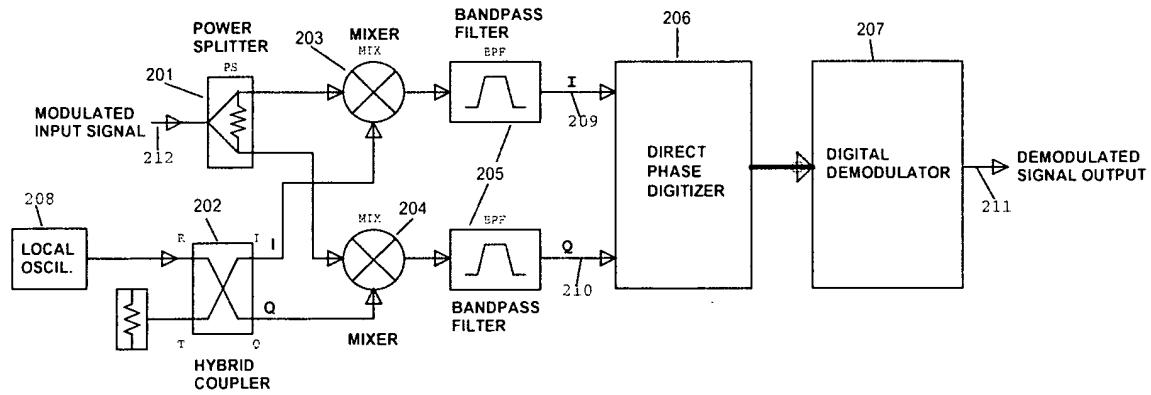


Figure 12. An embodiment of a receiver utilizing a digital demodulator.

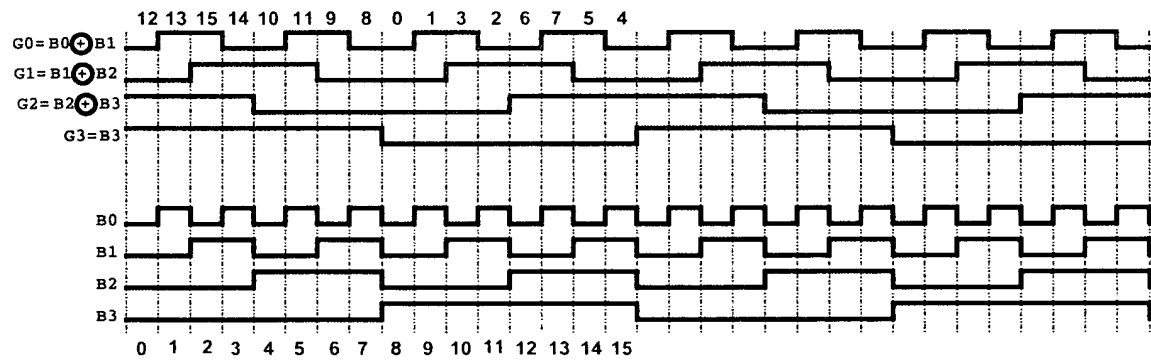


Figure 13. Conversion of Binary code to Grey code.

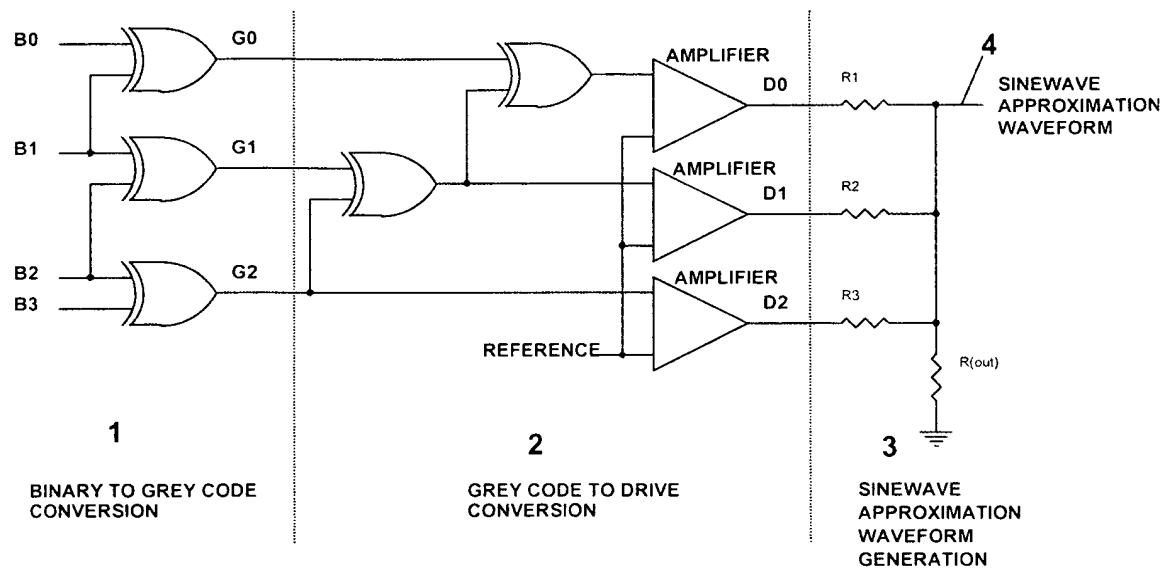


Figure 14. Phase to Amplitude conversion.

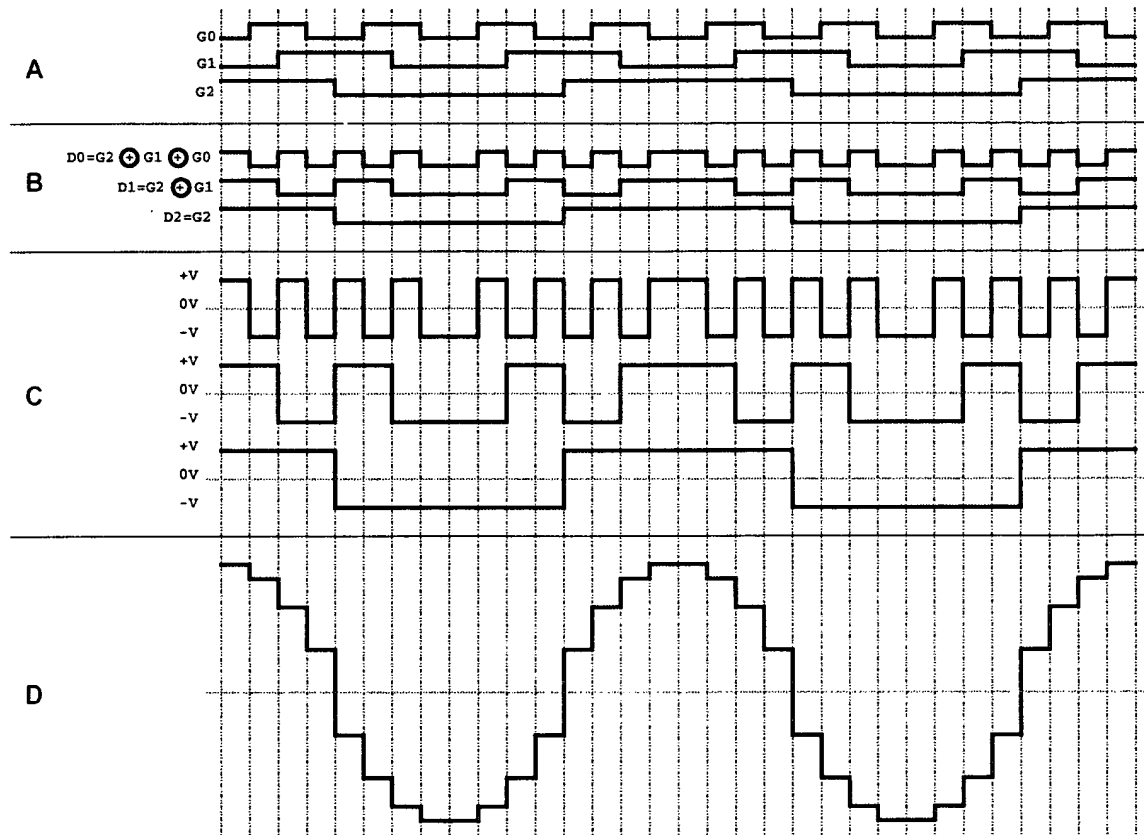


Figure 15. Waveforms in phase to amplitude conversion. A. Are the Grey Code bits. B. Are the EXORed Grey code bits. C. Are the signals at the output of the amplifiers. D. Is the Sinewave approximation waveform.